



Generell informasjon

Brønnbane navn	36/7-2
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	36/7-2 (Ulven)
Brønn navn	36/7-2
Seismisk lokalisering	NH 9205 - 113 A & SP. 625
Utvinningstillatelse	153
Boreoperatør	Norsk Hydro Produksjon AS
Boretillatelse	869-L
Boreinnretning	WEST VANGUARD
Boredager	21
Borestart	02.09.1997
Boreslutt	22.09.1997
Frigitt dato	22.09.1999
Publiseringsdato	23.05.2006
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	FENSFJORD FM
Avstand, boredekk - midlere havflate [m]	22.0
Vanndybde ved midlere havflate [m]	269.0
Totalt målt dybde (MD) [m RKB]	1435.0
Totalt vertikalt dybde (TVD) [m RKB]	1435.0
Maks inklinasjon [°]	1.8
Temperatur ved bunn av brønnbanen [°C]	34
Eldste penetrerte alder	PRE-DEVONIAN
Eldste penetrerte formasjon	BASEMENT
Geodetisk datum	ED50
NS grader	61° 18' 23.5" N
ØV grader	4° 19' 47" E



NS UTM [m]	6797817.45
ØV UTM [m]	571225.20
UTM sone	31
NPDID for brønnbanen	2990

Brønnhistorie

General

Well 36/7-2 was drilled on the Øygarden Fault Complex, ca 14 km west of the outer skerries of Bulandet in Sogn og Fjordane county. The primary target were the Late Jurassic Sognefjord and the Upper Jurassic Fensfjord formations.

Operations and results

Wildcat well 36/7-2 was spudded with the semi-submersible installation West Vanguard on 2 September 1997 and drilled to TD at 1435 m in basement rock. An anchor test was performed after setting the 13 3/8" casing shoe. Anchor no. 2 and 3 failed the test to 180 ton and slipped at 170 ton. Piggyback anchors were set on anchor no. 2, while main anchor no. 3 was lost. Fishing for the anchor chain was delayed 47.5 hrs due to bad weather. The anchor chain was retrieved and the anchor reset with two piggy backs. Both anchors then stood a successful test. The well was drilled with seawater and hi-vis pills down to 591 m and with ANCO 2000 from 591 m to TD.

The well discovered heavily biodegraded oil in the Middle Jurassic deltaic sandstone reservoir of the Fensfjord Formation. The overlying Sognefjord Formation sands were tight and contained no hydrocarbons. A 32.5 m oil column was proven from 931.5 to ca 964.0 m. The exact level of the oil-water contact could not be determined as it was in a shaley zone. Oil shows on cuttings were recorded from 915 m down to 1045 m. The reservoir zone of the Fensfjord Formation was divided into two units, from which only the upper had good reservoir properties.

No conventional cores were cut, but 60 sidewall cores were taken from 603 to 1408 m with a recovery of 56 samples. The MDT tool was run and 23 good pressure points were acquired in addition to a fluid sample at 934.5 m.

The well was completed on 22 September 1997 as an oil discovery.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
595.00	1435.00

Borekaks tilgjengelig for prøvetaking?	YES
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Palynologiske preparater i Søkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
603.0	[m]	SWC	RRI
615.0	[m]	SWC	RRI
623.0	[m]	SWC	RRI
639.0	[m]	SWC	RRI
653.5	[m]	SWC	RRI
665.0	[m]	SWC	RRI
685.0	[m]	SWC	RRI
695.0	[m]	DC	RRI
705.0	[m]	SWC	RRI
722.0	[m]	SWC	RRI
730.0	[m]	DC	RRI
744.0	[m]	SWC	RRI
755.0	[m]	DC	RRI
768.0	[m]	SWC	RRI
775.0	[m]	DC	RRI
785.0	[m]	DC	RRI
795.0	[m]	SWC	RRI
805.0	[m]	DC	RRI
817.5	[m]	SWC	RRI
834.0	[m]	DC	RRI
847.0	[m]	DC	RRI
859.0	[m]	DC	RRI
867.0	[m]	DC	RRI
870.0	[m]	DC	RRI
887.0	[m]	DC	RRI
900.0	[m]	DC	RRI
908.0	[m]	DC	RRI
920.0	[m]	DC	RRI
935.0	[m]	DC	RRI
945.0	[m]	DC	RRI
955.0	[m]	DC	RRI
969.5	[m]	SWC	RRI
975.0	[m]	DC	RRI
987.5	[m]	SWC	RRI
995.0	[m]	DC	RRI
1005.0	[m]	DC	RRI
1017.0	[m]	SWC	RRI
1037.0	[m]	SWC	RRI



1045.0 [m]	DC	RRI
1055.0 [m]	DC	RRI
1065.0 [m]	DC	RRI
1075.0 [m]	DC	RRI
1090.0 [m]	DC	RRI
1100.0 [m]	DC	RRI
1110.0 [m]	DC	RRI
1124.0 [m]	DC	RRI
1135.0 [m]	DC	RRI
1142.0 [m]	DC	RRI
1155.0 [m]	DC	RRI
1165.0 [m]	DC	RRI
1175.0 [m]	DC	RRI
1190.0 [m]	DC	RRI
1195.0 [m]	DC	RRI
1210.0 [m]	DC	RRI
1225.0 [m]	DC	RRI
1231.0 [m]	DC	RRI
1245.0 [m]	DC	RRI
1255.0 [m]	DC	RRI
1267.0 [m]	SWC	RRI
1280.0 [m]	DC	RRI
1290.0 [m]	DC	RRI
1300.0 [m]	SWC	RRI
1310.0 [m]	DC	RRI
1325.0 [m]	DC	RRI
1335.0 [m]	SWC	RRI
1340.0 [m]	DC	RRI
1352.0 [m]	SWC	RRI
1370.0 [m]	DC	RRI
1387.0 [m]	SWC	RRI
1390.0 [m]	DC	RRI
1400.0 [m]	DC	RRI
1408.0 [m]	SWC	RRI
1435.0 [m]	DC	RRI

Litostratigrafi



Topp Dyb [mMD RKB]	Litostrat. enhet
291	NORDLAND GP
648	ROGALAND GP
648	BALDER FM
678	CROMER KNOLL GP
678	SOLA FM
774	ÅSGARD FM
880	VIKING GP
880	DRAUPNE FM
917	SOGNEFJORD FM
936	HEATHER FM
947	FENSFJORD FM
1363	STATFJORD GP
1429	BASEMENT

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
2990	pdf	0.24

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
2990_1	pdf	11.89

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
2990_36_7_2_COMPLETION_REPORT	pdf	8.87

Logger





Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
ARRAY SONIC GR AMS	586	1431
CST GR AMS	603	1408
MDT GR AMS	918	1100
MDT GR AMS	934	1375
MWD - GR RES DIR	291	1435
PEX AMS	291	1433
VSP GR	586	1430

Foringsrør og formasjonsstyrketester

Type utforing	Utforing diam. [tommer]	Utforing dybde [m]	Brønnbane diam. [tommer]	Brønnbane dyp [m]	LOT/FIT slam eqv. [g/cm3]	Type formasjonstest
CONDUCTOR	30	340.0	36	355.0	0.00	LOT
SURF.COND.	13 3/8	587.0	17 1/2	591.0	1.48	LOT
OPEN HOLE		925.0	12 1/4	925.0	0.00	LOT
OPEN HOLE		1435.0	8 1/2	1435.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
592	1.05			WATER BASED	
1117	1.15	20.0		WATER BASED	
1435	1.16	18.0		WATER BASED	

Trykkplott

Porertrykksdataene kommer fra logging i brønnen hvis ingen annen kilde er oppgitt. I noen brønner der trykk ikke er logget, er det brukt informasjon fra formasjonstester eller brønnspark. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
2990 Formation pressure (Formasjonstrykk)	pdf	0.16

